

CLAIMS

What is claimed as being new and desired to be protected by LETTERS PATENT of the United States is as follows:

1. A vehicle bed liner apparatus, comprising:

flexible wall means for containing a quantity of ballast liquid, wherein said flexible wall means includes a flexible top wall, a flexible bottom wall, and a peripheral sealed region between said top wall and said bottom wall,

compartment boundary means located at plural internal non-peripheral regions between said flexible top wall and said flexible bottom wall, wherein said compartment boundary means are in contact with said flexible top wall and said flexible bottom wall, wherein said compartment boundary means define internal compartment boundaries, wherein said plural non-peripheral compartment boundaries and plural internal non-peripheral regions between said flexible top wall and said flexible bottom wall that are not in contact with said compartment boundaries define plural ballast compartments internal to said wall means, and wherein said ballast compartments are in communication with each other, and

interior access valve means in said flexible wall means for filling said ballast compartments with a ballast liquid and for emptying the ballast liquid from said ballast compartments.

2. The apparatus of claim 1 wherein:

said compartment boundary means include plural internal sealed regions between plural non-peripheral sealed portions of said flexible top wall and said flexible bottom wall, and

said plural internal sealed non-peripheral regions define internal sealed compartment boundaries, and wherein said plural non-peripheral compartment boundaries and plural internal unsealed non-peripheral regions between said flexible top wall and said flexible bottom wall define said plural ballast compartments.

3. The apparatus of claim 1 wherein each of said flexible top wall and said flexible bottom wall includes a single-layer outer liner and a single-layer inner liner.

4. The apparatus of claim 1 wherein each of said flexible top wall and said flexible bottom wall includes a double-layer, mesh-reinforced top outer liner and a single-layer inner liner.

5. The apparatus of claim 4 wherein said double-layer, mesh-reinforced top outer liner includes an inside flexible nylon mesh layer sandwiched between and a top layer of flexible vinyl liner material and a bottom layer of flexible liner material.

6. The apparatus of claim 1 wherein said interior access valve means is a combination fill and drain valve.

7. The apparatus of claim 1 wherein said compartment boundaries and said peripheral sealed region between said top wall and said bottom wall are formed by radio frequency (RF) welding between said top wall and said bottom wall.

8. The apparatus of claim 1 wherein said compartment boundaries have an X-shaped appearance from above said flexible wall means.

9. A combined cargo support and ballast apparatus for a vehicle having a truck bed including a floor and opposed side walls defining a pair of opposed wheel wells, respectively, said apparatus comprising:

a flexible, hollow, substantially rectangular-shaped bladder, and
a valve assembly for admitting a ballast liquid into the hollow interior of said bladder, wherein said bladder is suitably dimensioned to lie flat on said truck bed between said pair of opposed wheel wells.

10. The apparatus of claim 9 wherein said hollow interior of said bladder includes baffles for compartmentalizing said liquid ballast therein.

11. The apparatus of claim 9 wherein said bladder is fabricated of material that expands upon the freezing of the ballast liquid contained therein.

12. The apparatus of claim 11 wherein said bladder has a top wall and a bottom wall, and at least said top wall of said bladder is covered by a protective layer.